

	Type	Hits	Search Text	DBs
1	BRS	2715	lateral adj flow	USPAT; US-PGPUB; EPO; DERWENT
2	BRS	963415	particle\$1 or bead\$1	USPAT; US-PGPUB; EPO; DERWENT
3	BRS	862	(lateral adj flow) and (particle\$1 or bead\$1)	USPAT; US-PGPUB; EPO; DERWENT
4	BRS	59508	immobiliz\$	USPAT; US-PGPUB; EPO; DERWENT
5	BRS	137	((lateral adj flow) and (particle\$1 or bead\$1)) and immobiliz\$	USPAT; US-PGPUB; EPO; DERWENT
6	BRS	212310	label\$1 or marker\$1	USPAT; US-PGPUB; EPO; DERWENT
7	BRS	97	((((lateral adj flow) and (particle\$1 or bead\$1)) and immobiliz\$) and (label\$1 or marker\$1))	USPAT; US-PGPUB; EPO; DERWENT
8	BRS	118107	antibod\$3 or immunoglobulin\$1	USPAT; US-PGPUB; EPO; DERWENT
9	BRS	93	(((((lateral adj flow) and (particle\$1 or bead\$1)) and immobiliz\$) and (label\$1 or marker\$1)) and (antibod\$3 or immunoglobulin\$1))	USPAT; US-PGPUB; EPO; DERWENT
10	BRS	57	((((((lateral adj flow) and (particle\$1 or bead\$1)) and immobiliz\$) and (label\$1 or marker\$1)) and (antibod\$3 or immunoglobulin\$1)) and capillary	USPAT; US-PGPUB; EPO; DERWENT
11	BRS	683	brown adj william.in.	USPAT; US-PGPUB; EPO; DERWENT
12	IS&R	1770	(422/56).CCLS.	USPAT; US-PGPUB
13	BRS	502897	particle\$1 or bead\$1	USPAT; US-PGPUB
14	BRS	764	((422/56).CCLS.) and (particle\$1 or bead\$1)	USPAT; US-PGPUB
15	BRS	357	((422/56).CCLS.) and (particle\$1 or bead\$1)) and immobilize\$1	USPAT; US-PGPUB
16	BRS	52879	sandwich	USPAT; US-PGPUB
17	BRS	184	(((((422/56).CCLS.) and (particle\$1 or bead\$1)) and immobilize\$1) and sandwich	USPAT; US-PGPUB
18	BRS	7084	(particle\$1 or bead\$1) same immobilize\$1	USPAT; US-PGPUB
19	BRS	155	((422/56).CCLS.) and ((particle\$1 or bead\$1) same immobilize\$1)	USPAT; US-PGPUB

	Type	Hits	Search Text	DBs
20	BRS	85	sandwich and (((422/56).CCLS.) and ((particle\$1 or bead\$1) same immobilize\$1))	USPAT; US-PGPUB

'CAPLUS, MEDLINE, BIOSIS, CA ENTERED AT 10:25:43 ON 04 APR 2

L1 49 S LATER (W) FLOW
L2 2073210 S PARTICLE# OR BEAD#
L3 271188 S IMMOBILIZ?
L4 0 S L1 AND L2
L5 1068 S LATERAL (W) FLOW
L6 130 S L2 AND L5
L7 31 S L3 AND L6
L8 857780 S LABEL# OR MARKER#
L9 13 S L7 AND L8
L10 7 DUPLICATE REM L9 (6 DUPLICATES REMOVED)

=> d l10 1-5 ti abs so

L10 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1

TI **Lateral flow** device utilising particulate carrier

AB A **lateral flow** device having a porous reaction zone in communication with a porous filter zone. The reaction zone contains (i) analyte-specific **label** and (ii) a particulate carrier having analyte-specific capture reagent **immobilized** thereon. The filter zone has a smaller pore size than the reaction zone. **Label** not bound to the particulate carrier can thus enter the filter zone, unlike **label** that is bound to the carrier. After applying a sample, **lateral flow** brings analyte into contact with **label** and particulate carrier within the reaction zone, to form a complex. Free **label** does not bind to the particulate carrier. During flow from the reaction zone to the filter zone, free **label** migrates into the filter zone, whereas **particle-analyte-label** complex is captured at its entrance. This avoids the need to use **immobilized** antibody to capture an analyte-**label** complex.

SO PCT Int. Appl., 11 pp.
CODEN: PIXXD2

L10 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2

TI **Lateral flow** device with metal oxide indicator and applications for immunoassays

AB A **lateral flow** device with an indicator comprising a metal oxide **label** grafted to an analyzing moiety and assay method employing same are disclosed. The invention employs a plurality of metal oxide **particles** or metal oxide-coated non-porous silica **particles** as **labels** grafted to analyzing moieties that selectively bind the analyte, and identify the analyte to which the assay is directed. In a contemplated assay, after a sample is introduced, the analyzing moiety selectively binds the analyte, if present, to form an indicator-analyte complex. The complex flows through the device via capillary action to the receptor region where a second, capture, moiety that is affixed to the assay medium binds the complex thereby causing metal oxide indicators to accumulate. The assay can then be interpreted by a characteristic property of metal oxide **label** such as color at the receptor region.

SO PCT Int. Appl., 49 pp.
CODEN: PIXXD2

L10 ANSWER 3 OF 7 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

TI Enzyme substrate delivery and product registration in one step enzyme immunoassays.

AB One-step enzyme immunoassays in which enzyme-antibody conjugate or **label** and enzyme substrate are separated until separation of bound and free enzyme conjugate or **label** is complete. This separation is accomplished by using variable flow paths, **immobilization** of substrate at the test line, placement of substrate in a sac or association with a **particle label**, enzyme product chemical capture, delay zone dissolution and protected enzyme substrates.

SO Official Gazette of the United States Patent and Trademark Office Patents, (Oct. 23, 2001) Vol. 1251, No. 4, pp. No Pagination. e-file.
ISSN: 0098-1133.

L10 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 3

TI Method and apparatus for performing a **lateral flow** assay

AB A test strip adapted to receive a sample and evaluate an analyte comprises an application zone to which a sample may be added; an analyte measurement zone which includes an **immobilized** analyte binding agent; a zone comprising a control binding agent; a first control measurement zone which has an **immobilized** first control agent; and a second control measurement zone which has a second **immobilized** control agent capable of binding to the first control agent, the control measurement zones contain different amts. of **immobilized** control agents. An embodiment of the present invention provides a method for performing a **lateral flow** assay. The method includes depositing a sample on a test strip at an application region, detecting a first detection signal arising from the test strip in the first detection zone, and generating a baseline for the first measurement zone by interpolating between values of the detection signal outside of the first measurement zone and inside of the first detection zone. The method may include locating a beginning boundary and an ending boundary for the first measurement zone on the test strip. Addnl. detection zones having measurement zones may also be incorporated with the embodiment.

SO PCT Int. Appl., 58 pp.
CODEN: PIXXD2

L10 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 4

TI Improved **lateral flow** assays with **immobilized** control agent

AB Disclosed are **lateral flow** assays (test strips) characterized by: (a) one or more control zones having a control agent (e.g. dinitrophenol) **immobilized** thereto; (b) detection agent consisting of a conjugate of analyte-binding agent (e.g., *Helicobacter pylori* ext. or HIV envelope antigen), control-binding agent (e.g., anti-dinitrophenol antibody) and **label** (e.g., 16 nm colloidal gold, enabling reflectance measurements).

SO PCT Int. Appl., 71 pp.
CODEN: PIXXD2

=>

TI Enzyme substrate delivery and product registration in one-step enzyme immunoassays

AB One-step enzyme immunoassays and app. are disclosed in which enzyme-antibody conjugate or **label** and enzyme substrate are sepd. until sepn. of bound and free enzyme conjugate or **label** is complete. This sepn. is accomplished by using variable flow paths, **immobilization** of substrate at the test line, placement of substrate in a sac or assocn. with a **particle label**, enzyme product chem. capture, delay zone dissoln. and protected enzyme substrates. Enzyme substrate-loaded liposomes were prepd. from cholesterol, distearoyl phosphatidylcholine, and distearoyl phosphatidylethanolamine-(p-maleimidophenyl)butyrate and conjugated with anti-human chorionic gonadotropin (hCG) monoclonal antibody derivatized with SPDP. In a **lateral flow** one-step enzyme immunoassay device, capture zone membranes contained anti-hCG antibody conjugated with phospholipase or complement Clq.

SO PCT Int. Appl., 38 pp.
CODEN: PIXXD2

IN Nelson, Alan M.; Pawlak, Jan W.; Pronovost, Allan D.

L10 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 6

TI Canine Fc epsilon receptor and allergen to detect canine IgE

AB The present invention includes a method to detect canine IgE using a canine Fc epsilon receptor (Fc.epsilon.R) to detect canine IgE antibodies in a biol. sample from a canine. A method comprises contacting **immobilized** allergen with sample to form allergen-IgE complexes, followed by contacting with **immobilized** Fc.epsilon.R for quantitating IgE and for diagnosing allergy. The allergen is derived from fungi, trees, weeds, shrubs, grasses, wheat, corn, soybean, rice, eggs, milk, cheese, bovine, poultry, swine, sheep, yeast, fleas, flies, mosquitos, mites, midges, biting gnats, lice, bees, wasps, ants, true bugs and ticks. The present invention also relates to kits to perform such methods.

SO PCT Int. Appl., 66 pp.
CODEN: PIXXD2

IN Frank, Glenn Robert; Rushlow, Keith E.